

**PENNSYLVANIA GAME COMMISSION
BUREAU OF WILDLIFE MANAGEMENT
PROJECT ANNUAL JOB REPORT**

PROJECT CODE NO.: 06270

TITLE: Turkey Research/Management

JOB CODE NO.: 27009

TITLE: Nuisance Wild Turkey Transfer Pilot Program in Southwestern Pennsylvania

PERIOD COVERED: 1 July 2009 to 30 June 2010

COOPERATING AGENCIES: Pennsylvania Game Commission Southwest Regional Turkey Trap and Transfer Coordinator and Crews, Pennsylvania Game Commission Wild Turkey Biologist

WORK LOCATION(S): Southwest Pennsylvania, Pittsburgh metropolitan area portion of Wildlife Management Unit 2B

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ABSTRACT Some wild turkey flocks in the greater Pittsburgh area, which is located in the Pennsylvania Game Commission's Southwest Region (PGC-SWR), have grown in numbers beyond the local social carrying capacity, exceeding the turkey population objective outlined in the PGC's turkey management plan. In areas where hunting is not an option and where habitat modifications and the cessation of artificial feeding are unsuccessful in minimizing nuisance problems, a potential solution is to trap and transfer the nuisance flock, or a portion thereof, to a rural area at least 10 miles away. We are collecting data on movement, recidivism, survival, and captures/unit effort. We will also have an opportunity to collect data regarding how nuisance turkey flocks are perceived and if the problems are alleviated when some (but perhaps not all) turkeys are removed. Assessing and understanding these public attitudes is important to the success of wildlife management programs. Results will prove useful for determining if relocation of nuisance turkeys is a viable option for incorporation into future PGC wildlife management plans from both the ecological and social perspectives. From January – March 2010, there were no nuisance wild turkey complaints in the study area that warranted removal. Also, there were no reported leg band harvested turkeys during the fall 2009, nor spring 2010 turkey seasons from the transfers during 2008. Because none of the post-transfer survey forms were returned to us from landowners who had turkeys transferred off their properties in 2008, we assume the landowners do not have any re-occurring nuisance turkey problems.

OBJECTIVES

1. Relocate turkeys from large suburban or urban nuisance wild turkey flocks in the greater Pittsburgh area portion of Wildlife Management Unit (WMU) 2B in southwestern Pennsylvania to rural areas.
2. Determine if birds return to nuisance location or if relocated turkeys become nuisances in the relocated area (recidivism).
3. For turkeys that exhibit recidivism, determine if there are particular behaviors these turkeys continue or develop after relocation (e.g., aggression, property damage).
4. Determine survival of leg-banded, relocated turkeys (if sufficient sample size).
5. Determine how the public perceives nuisance turkey flocks and if removal of some or all of the turkeys alleviates their concerns.

INTRODUCTION

As turkeys become reestablished throughout their historical range, they have demonstrated an ability to adapt and coexist in urban and suburban settings. As a result, reports of nuisance wild turkey situations have increased as turkey populations continue to grow in Pennsylvania and elsewhere. In some situations, individual wild turkeys exhibit aggressive behavior toward humans and do not respond to efforts to condition them to avoid humans. These individual birds are captured and humanely destroyed. Turkey flock sizes can also be a source of human-wildlife conflict. In areas where habitat carrying capacity has not been exceeded, factors contributing to large flock sizes include minimal hunting pressure, and in some cases, the availability of artificial food sources. Some flocks in urban or suburban settings have grown in numbers beyond the local social carrying capacity, thus they have exceeded the turkey population objective outlined in the Pennsylvania Game Commission's (PGC) turkey management plan (Casalena 2007). A potential solution is to trap and transfer the nuisance flock or a portion of the flock, to a rural area at least 10 miles away. Results will prove useful for determining if relocation of nuisance turkeys is a viable option for incorporation into future PGC wildlife management plans elsewhere in the Commonwealth.

STUDY AREA

The greater Pittsburgh area in Wildlife Management Unit (WMU) 2B is the pilot area for this 3-year project.

METHODS

Complaints about wild turkeys in the greater Pittsburgh area portion of WMU 2B are first addressed per the draft Standard Operating Procedure 40.13, Guidelines for Handling Nuisance Wild Turkey Conflicts. Turkeys from large nuisance flocks are trapped and transferred only after other alternatives for mitigating the problem(s) have been exhausted (See Casalena 2006). Any

wild turkeys that exhibit obvious signs of aggressive behavior or sickness are not relocated, and are humanely destroyed. Any turkeys captured that appear to be of domestic stock, or mixed wild and domestic stock, are humanely destroyed. Although possibility of disease transmission is low, any turkeys of questionable origin or health are humanely euthanized rather than possibly spreading sickness to wild flocks.

Regional turkey trapping teams have been trained in turkey trapping, handling, and relocation. All trapping occurs annually during the months of December – March. All turkeys are relocated at least 10 air miles from capture location to ensure they do not return to the capture location (Casalena 2006). Turkeys are released on public lands or private lands open to public hunting. Southwest Region (SWR) personnel determine relocation areas based on distance from the capture site and habitat availability.

Prior to being released, all turkeys are leg-banded. Where there is a spur present, leg bands are placed below the spur (i.e., between the foot and the spur). Leg bands are stamped with the SWR telephone number, and contain a unique alpha-numeric number. Gobblers are tagged with one rivet leg-band (M0001-M0200). Preliminary research by Diefenbach et al. (2009) demonstrated that retention rate of aluminum butt-end bands are not satisfactory for gobblers and rivet bands should be used to ensure band retention. Hens are tagged with two butt-end bands, a green colored aluminum band on one leg (F0001 – F0100) and a stainless steel band on the other (F0001 – F0200). Two butt-end bands are used to ensure band retention. Band retention rates have not been studied for hens. Completed data sheets are sent to the Regional Wildlife Management Supervisor (WMS) within 10 working days of a trap and transfer event and the trapper maintains a copy.

Human Dimensions

Pre-trapping survey forms are completed by the complainants (with address and phone number for follow-up) prior to trapping activity, and immediately returned to the turkey trappers. The post-trapping survey forms are mailed to the complainants within one month of trapping activity. The regional WMS will follow-up as needed.

Regional dispatchers or WMS collect information regarding turkey sightings or harvested turkeys on a standardized spreadsheet. The SWR WMS maintains the database for this project and provides data to the Bureau of Wildlife Management (BWM) annually for annual reports. All analyses are dependent on sufficient sample-size. Descriptive statistics will be used until sample size is sufficient for statistical analyses, most likely several years. The program MARK (White and Burnham 1999) will be used for estimating survival rates.

Ecological analyses include survival rates, movement, recidivism, and leg-band retention. Survival rates will be estimated using a band-recovery type model (Brownie et al. 1985), but modified to incorporate the fact that leg-banded birds will have reporting rates <100%. The models can be constructed using the software SURVIV (White 1983) or MARK. Human dimensions include identifying and qualifying what constitutes a “problem” or “nuisance” flock and determining if these were perceived as alleviated following the removal of some or all of the turkeys. Survey results will be compiled and summarized annually.

RESULTS

From January – March 2010, there were no nuisance wild turkey complaints in the study area that warranted removal. Also, there were no reported leg band harvested turkeys during the fall 2009 or spring 2010 turkey seasons from the transfers during 2008.

Because none of the post-transfer survey forms were returned to us from landowners who had turkeys transferred off their properties in 2008, we assume the landowners did not have re-occurring nuisance turkey problems this year.

RECOMMENDATION

This job should be continued as designed for the 3-year pilot project to determine if relocation of nuisance wild turkeys is a viable management option.

LITERATURE CITED

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